

Synthesis and Assessment Product 4.6

Analysis of the Effects of Global Change on Human Health and Welfare and Human Systems

PROJECT GOAL

The project will assess the impacts of climate variability and change on human health, human welfare, and human systems in the United States.

Potential Health Effects of Climate Variability and Change

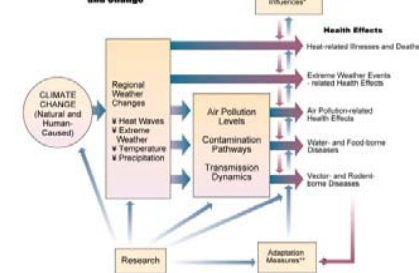


Figure 1. Patz, et al. 2001

PROJECT TEAM

LEAD AGENCY

- Environmental Protection Agency

SUPPORTING AGENCIES

- Department of Energy
- National Aeronautics and Space Administration
- National Oceanic and Atmospheric Administration

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Human Health BACKGROUND

Health effects associated with global change may be wide-ranging can occur via pathways of varying directness, scale, and complexity (Figure 1).

- The Health Sector Assessment, carried out as part of the First National Assessment of the Potential Consequences of Climate Variability and Change in the United States found that:
 - Populations in northeastern and Midwestern cities are likely to experience the greatest number of excess deaths and illnesses as a result of increases in summer temperatures

- If the climate becomes warmer and more variable, air quality is likely to be effected, with associated impacts human health.
- While federal and state laws governing water quality are protective of the American people, increased climate variability may increase the risk of contamination events.
- If the public health system is maintained, the U.S. is unlikely to experience any major epidemics of vector or rodent-borne illnesses.

PROPOSED CONTENT for Human Health

Key Focus Question

What are the potential human health effects of global environmental change, and what climate, socioeconomic, and environmental information is needed to assess the cumulative risk to health from these effects and to inform adaptations in the provision of public health and health care interventions?

SECTION ONE

This section focuses on an assessment of the potential impacts of environmental change on four health endpoints: water-borne illnesses, vector- and rodent-borne illnesses, human morbidity and mortality associated with changes in air quality, and human morbidity and mortality associated with extreme weather.

Questions

- What are the potential impacts of environmental changes, especially changes in climate variability and change, in the United States?
- Also, what are potential indirect effects, such as impacts on quality of life or on economic outcomes.

NOTE: The sections of Prospectus 4.6 that address the impacts of climate variability and change on human welfare and human systems are under development. Please watch for the posting of the Prospectus on the CCSP web site later this calendar year.

SECTION TWO

The second section of the report will focus on adaptation to the potential impacts of environmental change on human health in the United States.

Questions

- Assess existing adaptation efforts for responding to human health impacts of climate variability and change in the United States.
- What scientific information do public health decision makers require to develop effective adaptation responses?
- Evaluate methods for developing decision tools and information products designed to enhance public health adaptation and support effective decision making.
- How can the capacity of public health and societal infrastructure be improved to prevent, detect, and effectively respond to health impacts associated with climate change?

PROCESS

Expert Authors will prepare sections of the report. Coordinating Authors will provide overall guidance and editorial lead on executive summaries.



Nominations are being accepted.
Contact EPA Lead.

A Federal Advisory Committee will be convened to serve as Expert Scientific Reviewers.



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The draft report will be subject to extensive public review announced in the Federal Register.

Coordinating Authors and Sponsoring Agencies are developing a communications strategy. The focus is on engaging stakeholders in the public health community.

The report will meet all relevant standards of the Information Quality Act.

DISCLAIMER

The views expressed in this presentation are those of the author[s] and do not necessarily reflect the views or policies of the U.S. Environmental Protection Agency.



PROJECT TIMELINE

Task	Due Date
Prospectus posted on CCSP web site for public comment (30 days)	Dec 2005
Final prospectus posted on the CCSP web site	Feb 2006
First Coordinating and Lead Authors meeting	Jan 2006
Rough outline for Sections 1, 2 and 3	June 2006
First draft for expert review complete	Nov 2006
Expert review completed	Jan 2007
Second draft for public review complete	Apr 2007
Public comment on second draft complete	June 2007
Third draft completed	Aug 2007
Third draft submitted to CCSP Interagency Committee	Aug 2007
Final product posted on CCSP web site	Dec 2007